


**SIGMA-ALDRICH**
**Material Safety Data Sheet**

Date Printed: 01/09/2003

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Version 1.30

**Section 1 - Product and Company Information**

Product Name	PROPIIDIUM IODIDE, 95%
Product Number	287075
Brand	Aldrich Chemical
Company	Sigma-Aldrich
Street Address	3050 Spruce Street
City, State, Zip, Country	SAINT LOUIS, MO 63103 US
Technical Phone:	314 771 5765
Fax:	800 325 5052
	<b>Emergency Phone:</b> 414 273 3850 Ext. 5986

**Section 2 - Composition/Information on Ingredient**

<b>Substance Name</b>	<b>CAS #</b>	<b>SARA 313</b>
PROPIIDIUM IODIDE	25535-16-4	No

<b>Formula</b>	C27H34N4.2I
<b>Synonyms</b>	3,8-Diamino-5-(3-(diethylmethylammonio)propyl)-6-phenylphenanthridinium diiodide, Propidium diiodide, Propidium Iodide

**Section 3 - Hazards Identification**
**Emergency Overview**

Irritant.

Irritating to eyes, respiratory system, and skin.

**HMIS Rating**

Health: 2 Flammability: 0 Reactivity: 1

**NFPA Rating**

Health: 2 Flammability: 0 Reactivity: 1

For additional information on toxicity, please refer to Section 11.

**Section 4 - First Aid Measures**
**Oral Exposure**

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

**Inhalation Exposure**

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**Dermal Exposure**

In case of contact, immediately wash skin with soap and copious amounts of water.

**Eye Exposure**

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

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**Section 5 - Fire Fighting Measures**

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**Autoignition Temp:** N/A**Extinguishing Media  
Suitable**

Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

**Firefighting****Protective Equipment**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Specific Hazard(s)**

Emits toxic fumes under fire conditions.

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**Section 6 - Accidental Release Measures**

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**Procedure to be Followed in Case of Leak or Spill**  
Evacuate area.**Procedure(s) of Personal Precaution(s)**

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

**Methods for Cleaning Up**

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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**Section 7 - Handling and Storage**

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**Handling****User Exposure**

Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**Storage****Suitable**

Keep tightly closed. Store at 2-8°C (35.6-46.4°F). Store in the dark.

**Special Requirements**

Light sensitive. Hygroscopic. Refrigerate.

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**Section 8 - Exposure Controls / PPE**

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**Engineering Controls**

Safety shower and eye bath. Mechanical exhaust required.

**Personal Protective Equipment****Respiratory**

Government approved respirator.

**Hand**

Compatible chemical-resistant gloves.

**Eye**

Chemical safety goggles.

**General Hygiene Measures**  
Wash thoroughly after handling.

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**Section 9 - Physical/Chemical Properties**

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Appearance	
Physical State	Color
Solid	Deep red
Molecular Weight:	668.41 AMU
pH	N/A
BP/BP Range	N/A
MP/MP Range	220 - 225 °C
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A
Explosion Limits	N/A
Flammability	N/A
Autoignition Temp	N/A
Solubility	N/A

N/A = not available

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**Section 10 - Stability and Reactivity**

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**Stability****Stable**

Stable.

**Conditions of Instability**

May decompose on exposure to light May decompose on exposure to moist air or water

**Materials to Avoid**

Strong oxidizing agents.

**Hazardous Decomposition Products****Hazardous Decomposition Products**

Carbon monoxide, Carbon dioxide, Nitrogen oxides, Hydrogen iodide.

**Hazardous Polymerization**  
**Hazardous Polymerization**  
Will not occur.

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### Section 11 - Toxicological Information

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**Route of Exposure****Skin Contact**

Causes skin irritation.

**Skin Absorption**

May be harmful if absorbed through the skin.

**Eye Contact**

Causes eye irritation.

**Inhalation**

Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

**Ingestion**

May be harmful if swallowed.

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**RTECS Number:** SF7949600

**Toxicity Data**

Subcutaneous - Mouse: 16 MG/KG (LD50)

**Chronic Exposure - Mutagen**

Result: Laboratory experiments have shown mutagenic effects.

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### Section 12 - Ecological Information

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No data available.

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### Section 13 - Disposal Considerations

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**Appropriate Method of Disposal of Substance or Preparation**

Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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### Section 14 - Transport Information

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**DOT**

**Proper Shipping Name:** None

**Non-Hazardous for Transport:** This substance is considered to be non-hazardous for transport.

**IATA**

**Non-Hazardous for Air Transport:** Non-hazardous for air transport.

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### Section 15 - Regulatory Information

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**EU Additional Classification**

**Symbol of Danger:** Xi

**Indication of Danger**

Irritant.

**Risk Statements** R: 36/37/38

Irritating to eyes, respiratory system, and skin.

**Safety Statements** S: 26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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Sigma-Aldrich Corporation

[www.sigma-aldrich.com](http://www.sigma-aldrich.com)

**US Classification and Label Text****Indication of Danger**

Irritant.

**Risk Statements**

Irritating to eyes, respiratory system, and skin.

**Safety Statements**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

**United States Regulatory Information**

SARA Listed: No

**Canada Regulatory Information****WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

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**Section 16 - Other Information**

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**Disclaimer**

For R&amp;D use only. Not for drug, household or other uses.

**Warranty**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2003 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.